## Max-Planck-Institut für Immunbiologie und Epigenetik





## Introduction into R

R is a popular programming language for statistical analysis and data visualisation. In this practical course you will learn the basic concepts of R. The target audience are IMPRS students and postdocs. We will include the following topics:

- Structures: Data and Functions
- Descriptive Statistics: deriving basic information from data
- Visualisation: simple plots and representing high-dimensional data
- I/O: getting data into and out of R
- Data munging: preparing and shaping data for analysis
- Automation: writing simple scripts for repeated use
- Packages: using community power for difficult task

## Goal:

After the course you will be able to use R for simple statistical analysis, repetitive computations, and the generation of publication-ready images. More importantly, you will also be able to identify and use thousands of public software packages that can help you with more challenging tasks and domain-specific analyses

## Requirements:

This is a hands-on course and requires a WLAN-capable laptop with:

- Basic Internet Access.
   Your laptop needs to be registered with core-IT.
- 2. Access to workbench platform: <a href="https://workbench.ie-freiburg.mpg.de">https://workbench.ie-freiburg.mpg.de</a>
  You need a Linux account from core-IT
- 3. Know your keyboard!

  Special characters will be needed throughout the course, e.g.

  \$ , | , [, ], {, }, >, <, #, ~, &, ^, %, !, ?

Course language: English

**Maximal Number of Participants: 15** 

First come - first serve